

CONTENTS OF VOLUME 14

Number 1

Y. Wu, Y. Rong, W. Ma and S. R. LeClair	1	Automated modular fixture planning: Geometric analysis
Y. Wu, Y. Rong, W. Ma and S. R. LeClair	17	Automated modular fixture planning: Accuracy, clamping, and accessibility analyses
Q. G. Zhang and R. B. Greenway	27	Development and implementation of a NURBS curve motion interpolator
R. Boudreau, G. Levesque and S. Darenfed	37	Parallel manipulator kinematics learning using holographic neural network models
L. H. S. Luong	45	A decision support system for the selection of computer-integrated manufacturing technologies
Y.-C. Kao and G. C. I. Lin	55	Development of a collaborative CAD/CAM system
A. Fahim and K. Choi	69	The UniSet approach for the programming of flexible manufacturing cells
	79	Calendar
	81	<i>PatentsALERT</i>

Number 2

Ting-Kuo Peng and A. J. C. Trappey	89	A step toward STEP-compatible engineering data management: the data models of product structure and engineering changes
J. S. Yu, G. Quick, W. Paulicks, P. C. Müller and W. Berteit	111	Transputer-based robot control system for six-joint robot manipulators
Hong-Sen Yan, Ning-Sheng Wang, Jin-Ge Zhang and Xian-Yu Cui	121	Modelling, scheduling and simulation of flexible manufacturing systems using extended stochastic high-level evaluation Petri nets
L. I. Slutski	141	Design principles of adaptive control systems for telerobots
L. Zhuang, Y. S. Wong, J. Y. H. Fuh and C. Y. Yee	153	On the role of a queueing network model in the design of a complex assembly system
R. Ben-Horin, M. Shoham and S. Djerassi	163	Kinematics, dynamics and construction of a planarly actuated parallel robot

Number 3

- | | | |
|----------------------------------------------------|-----|-----------------------------------------------------------------------------------------------------------------------------|
| Hong Du and G. C. I. Lin | 173 | Development of an automated flexible fixture for planar objects |
| B.-S. Ryu and H. S. Yang | 185 | An enhanced topological map for efficient and reliable mobile robot navigation with imprecise sensors |
| C. Ou-Yang and J. S. Lin | 199 | The development of a hybrid hierarchical/heterarchical shop floor control system applying bidding method in job dispatching |
| D. E. Schinstock | 219 | Approximate solutions to unreachable commands in teleoperation of a robot |
| J. Jackman and D.-K. Park | 229 | Probe orientation for coordinate measuring machine systems using design models |
| J.-F. Petiot, P. Chedmail and J.-Y. Hascoët | 237 | Contribution to the scheduling of trajectories in robotics |

Number 4

- | | | |
|-------------------------------------------------------------------|-----|----------------------------------------------------------------------------------------------------------------------------------|
| R. Marín, J. Garrido, J. L. Trillo, J. Armesto and J. Sáez | 253 | Object oriented framework to develop automated warehousing systems based on step |
| Y. Yanagihara, T. Kakizaki, K. Arakawa and Y. Isoda | 263 | A multimodal teaching advisor for sensor-enhanced robotic systems in manufacturing |
| Y.-M. Chen and T.-H. Tsao | 275 | A structured methodology for implementing engineering data management |
| Z.-F. Yang and W.-H. Tsai | 297 | Using parallel line information for vision-based landmark location estimation and an application to automatic helicopter landing |
| Y. Edan, L. Friedman, A. Mehrez and L. Slutski | 307 | A three-dimensional statistical framework for performance measurement of robotic systems |
| U. Roy and Y. Xu | 317 | 3-D object decomposition with extended octree model and its application in geometric simulation of NC machining |

Number 5/6

- | | | |
|---------------------------------------------------------------------------------|-----|-------------------------------------------------------------------------|
| C. Mavroidis, J. Flanz, S. Dubowsky, P. Drouet and M. Goitein | 329 | High performance medical robot requirements and accuracy analysis |
| F.T.S. Chan, K.L. Mak, L.H.S. Luong and X.G. Ming | 339 | Machine-component grouping using genetic algorithms |
| X.G. Ming, K.L. Mak and J.Q. Yan | 347 | A PDES/STEP-based information model for computer-aided process planning |
| E. Westkämper, R.D. Schraft, M. Schweizer, T.F. Herkommer and A. Meißner | 363 | Task-oriented programming of large redundant robot motion |
| S.P. Layne and T.J. Beugelsdijk | 377 | Mass customized testing and manufacturing via the Internet |

SPECIAL ISSUE SECTION: MANUFACTURING SYSTEMS DESIGN

A. Villa	389	Editorial
A. Villa	393	Product-process design and continuing innovation
M. Cantamessa	403	The manufacturing system as a complex artifact
A. Kusiak and D.W. He	415	Design for agility: a scheduling perspective
L. Alting, M. Hauschild and H. Wenzel	429	Elements in a new sustainable industrial culture. Environmental assessment in product development
C.-Y. Huang and Y. Nof	441	Development of integrated models for material flow. Design and control - a tool perspective
P. Valckenaers, H. Van Brussel, J. Wyns, L. Bongaerts and P. Peeters	455	Designing Holonic manufacturing systems
G. Perrone and S.N. La Diega	465	Fuzzy methods for analysing fuzzy production environment